

Energy Advisory Board Minutes
Meeting 2
August 9, 2001

A meeting of the Energy Advisory Board was called to order by Mr. Jack Conway, Chairman, at 1:00 p.m. on August 9, 2001.

Members present: Mr. George Siemens, Utility Industry Representative; Mr. Haydon Timmons, Utility Industry Representative; Mr. Tom FitzGerald, Kentucky Resources Council; Mr. Robert Addington, Kentucky Coal Industry Representative; Mr. Donald Daily, Industrial Consumer Representative; Mr. Bill Daugherty, Oil and Gas Industry Representative; Secretary James Bickford, Natural Resources and Environmental Protection Cabinet; Deputy Secretary Redmon Lair, proxy for Secretary Ron McCloud, Public Protection and Regulation Cabinet; Mr. J.R. Wilhite, Commissioner, proxy for Secretary Gene Strong, Economic Development Cabinet; Mr. Martin Huelsmann, Chairman, Public Service Commission; Mr. John Davies, Director, Division of Energy; Dr. Ari Geertsema, Director, Kentucky Center for Applied Energy and Research and Mr. Charles Martin, Western Kentucky USEC Representative.

Chairman Conway noted a quorum was present and that the press had been notified regarding the meeting.

Mr. Thomas Dorman, Executive Director, Public Service Commission, reported on the status on the hiring of an Executive Director. Acceptance of applications has been closed for the position. Mr. Dorman noted that there were forty-eight (48) respondents with about half of them being from out of state, although some have Kentucky roots. Mr. Dorman stated that the process of reducing the applicants to a group of about ten (10) would begin; with whom interviews will be conducted.

Secretary Bickford, NREPC, explained that the cabinet has formed a work group consisting of experts in air quality, water quality, and waste management. Secretary Bickford noted that to date, the group had compiled a list of all permits requested for new power plants and a compliance history of all existing plants and began reviewing the current plants. The group has partnered with USCPA to model air emissions from existing and proposed plants to determine the regional air quality problems that these plants may propose. Secretary Bickford stated that the model would address ozone, regional haze and fire particulate concerns.

Secretary Bickford noted that the Cabinet has also established a protocol for more specific modeling that will allow evaluating the impacts of air toxins and heavy metals. In addition to inventorying and assessing current volumes and practices of ash management and disposal.

Secretary Bickford stated that a draft report is expected by November 1, 2001 and a final report to the Governor by December 7, 2001.

Mr. Bob Amato, Director of Engineering, Public Service Commission, presented a status report on transmission grid modeling project by the PSC. Mr. Amato noted that in order to accomplish the task, a task force consisting of a transmission engineer from each of the six (6) transmission owning utilities in the state was created.

Mr. Amato stated that the task force decided it could indicate the effects of the proposed generation by including the facilities in a detailed electric flow analysis model of the grid in Kentucky. Mr. Amato noted that the model is actually of the entire Eastern United States and Canada but is detailed only in and around Kentucky.

The models, Mr. Amato stated, will be used to determine which transmission lines will be deficient to carry loads if all generation were on line during the summer peak scenario. The model will be both for power flows South and North. Mr. Amato noted that the task force would then back down the proposed generation until there are no transmission failures.

Mr. Amato stated that the information from the model runs would indicate the grid's capacity to handle additional generation as well as point out potential transmission constraints.

Mr. Amato noted that the task force plans to run the scenarios by mid-September and have a draft report by October.

Mr. Huelsmann, Chairman, Public Service Commission, using a chart provided to board members, presented answers to questions from the previous Board meeting.

Mr. Huelsmann stated that there are four (4) different types of electricity being generated: coal-fired, gas-fired, hydro and oil fired plants. Mr. Huelsmann affirmed that coal-fired plants make up 87% of generation. Coal-fired facilities in Kentucky, Mr. Huelsmann noted, include American Electric Power/Kentucky Power, Big Rivers, East Kentucky Power Cooperative, Kentucky Utilities, which also has a couple of hydro facilities, and Louisville Gas and Electric, which, in addition, includes a hydro facility. Mr. Huelsmann stated that all utilities are considered summer peak with the exception of American Electric Power/Kentucky Power and East Kentucky Power Cooperative, which are winter peak facilities.

Mr. Huelsmann also noted that Big Rivers and Union Light Heat & Power have no planned capacity. Each of these companies purchase wholesale electricity.

In reference to questions concerning reserves, Mr. Huelsmann stated that Louisville Gas & Electric and Kentucky Utilities are at about 12-14% perspective reserves and that East Kentucky Power is at approximately 13%.

Mr. Huelsmann noted that forecasted plant additions through 2015 were provided for Louisville Gas & Electric/Kentucky Utilities, East Kentucky Power Cooperative, Big Rivers and American Electric Power/Kentucky Power.

Demand-side management was addressed for each utility. Mr. Huelsmann explained demand-side management as interruptible power stating that if demand is great, utility has the ability to turn power off or force a corporation to pay the wholesale rate or market rate for electricity during that time. This would mainly affect large corporate consumers.

Mr. Huelsmann stated that another concept of demand-side management includes "real time" meters, which are likely to be used in the future. Mr. Huelsmann explained that these meters would mean that consumers would pay less for electricity used at night compared to electricity used in the afternoon.

Mr. Huelsmann stated that the Public Service Commission's major concern is transmission and reliability of electricity but will also study siting criteria.

Secretary Bickford, Natural Resources and Environmental Protection Cabinet, responded to the question of the first Board meeting as to whether or not the Cabinet would be looking at heavy metals. Secretary Bickford indicated that they would be.

Mr. Dan Becker, Director of Transmission, Louisville Gas & Electric; Bernie Pasternack, Director of Transmission Planning, American Electric Power; Terry Boston, Executive Vice President of Transmission Power Supply, Tennessee Valley Authority; and Paul Atchison, Vice President, Power Delivery, East Kentucky Power Cooperative provided a presentation on the basics of transmission.

Mr. Becker stated that the status of transmission in Kentucky today results from recent changes in the regulatory environment in transmission.

Mr. Becker noted that utilities interconnected with neighbors for reliability to share reserves and reduce the need for installed generation. Mr. Becker stated that utilities used off system transactions to share cost savings and reduce cost to customers.

Mr. Becker stated that in 1996, FERC issued order 888, which opened the transmission to anyone who wanted to pay for it and order 889, which established a separation between transmission operations in the traditional utilities and their merchant functions. The consequences, Mr. Becker noted, of

these changes is that now, transmission is not only with neighboring states but span multiple states and has created a requirement to look at transmission on a regional perspective.

Mr. Becker stated that Kentucky's transmission map shows that it is not well tied together. Mr. Becker explained that each company in Kentucky developed this transmission mainly to connect its generation to its load centers and that Kentucky did not develop it to primarily wheel power out or into the state. Mr. Becker also stated that Kentucky's transmission is adequate for existing generators dedicated to the customers but large load generation would create the need for the transmission to be upgraded. Mr. Becker affirmed that the transmission grid is not presently designed to handle large regional transfers of power.

Mr. Becker explained that under the open access tariffs of FERC, whoever creates the need for an upgrade is the entity that pays for it. FERC issued order 2000, which mandates a voluntary approach to regional transmission organizations (RTO). The order defines an RTO as having independence from market participants including traditional utilities. Mr. Becker stated that an RTO should be covering a large enough region to be able to control the transmission system on regional basis. Mr. Becker also stated that the RTOs are now looking at transmission on a regional basis and hopefully will have a more optimum solution. Mr. Becker said that focusing on what is happening in a region and not simply at transmission areas can enhance transmission reliability. The results of regionalization will be non-stop transmission across the region. Mr. Becker stated that Kentucky would need to participate in developing a regional approach to transmission. Mr. Becker also noted that transmission will always be at a regulated, FERC approved, rate.

Mr. Becker declared that upgrading voltage alone will not provide the kind of power flows that utility industries forecast will occur with the quantity of proposed gas-burning plants. Mr. Becker stated that it would take new transmission to move the quantities of proposed power that would be built along the gas pipelines and well heads.

Mr. Pasternack stated that the Alliance and the Midwest ISO believe that if there is an incremental cost being caused by a power plant developer that they should bear the cost burden.

Mr. Becker stated that whether or not Kentucky has RTOs, there is still the need to know basically where the generations are going to locate and where the load centers that they serve will be. Therefore, it has been very difficult to figure out how to locate transmission lines and how to pay for those transmission lines without a long-term contract.

Mr. Siemens stated that when a utility built a generation plant in the past, it knew where the load was and electrons would flow to that load. In a merchant plant's case, the contract is going to go where the demand is.

Governor Patton asked if FERC makes the decision of who should pay for upgrades.

Mr. Becker stated that in the case of the investor-owned utilities, FERC is the ultimate arbiter.

Mr. FitzGerald asked if there is an obligation of the existing utility to extend service and use its condemnation powers to hook-up a merchant plant.

Mr. Becker responded that under present FERC rules the utility would have to build a line.

Mr. Raff added that a merchant plant could either decide to build a transmission line from its plant to make the connection to the utility. If it makes that choice, the merchant plant pays for that cost up front and does not have the right of eminent domain and has to acquire private right-of-ways. Mr. Raff then explained that alternatively, it could request the utility to make that connection at the merchant plant within its boundary. In that case the utility is obligated to make the connection. It would have the right of eminent domain to acquire right-of-ways because the merchant plant would then be a customer and the cost of that connection would be recovered through their FERC tariff from the merchant plant. Mr. Raff noted that often times, the merchant plant might decide that it could build it at a lower cost than the utility.

Being no further business, Chairman Conway adjourned the meeting.